

Wilmington, Delaware  
August 20, 2009  
August 27, 2009

#3217

Sponsors:

Council  
Members  
Potter  
Ignudo

**WHEREAS**, pursuant to Section 5-600(a) of the Wilmington City Charter, City Council may, after a public hearing, adopt a Comprehensive Development Plan, or any part or modification thereof; and

**WHEREAS**, the existing City Wide Plan of Land Use, which is a component of the Comprehensive Development Plan, was adopted by the Wilmington Planning Commission on January 9, 1956, and was subsequently amended in parts on various dates; and

**WHEREAS**, the State of Delaware Source Water Protection Law of 2001 requires the city to create a Source Water Protection Area (SWPA) on the Brandywine Creek as part of its Comprehensive Development Plan and to protect the SWPA through a Zoning Code change to establish rules for such a purpose, and the Department of Planning, acting with the advice of the City Planning Commission, has recommended that the Comprehensive Development Plan be amended as set forth in the document entitled, "The City-Wide Plan of Land Use," dated August 2009, a copy of which is attached hereto; and

**WHEREAS**, in accordance with Section 5-600(a) of the City Charter, a duly advertised public hearing was held by the Council on August 20, 2009.

**NOW, THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE CITY OF WILMINGTON** that the Comprehensive Development Plan component entitled "The City-

Wide Plan of Land Use" dated August 2009, a copy of which is attached hereto and made a part hereof, is hereby amended and adopted as part of the Comprehensive Development Plan for the City.

Passed by City Council,  
~~August 20, 2009~~  
August 27, 2009

ATTEST: Maribel Ruiz  
City Clerk

Approved as to form this 17<sup>th</sup>  
day of August, 2009.

  
Senior Assistant City Solicitor  
Kara S. Coats

**SYNOPSIS:** This Resolution approves amendments regarding the Source Water Protection Area to the City's Comprehensive Development Plan by adopting the Plan component entitled "City-Wide Plan of Land Use" which has been reviewed by the Planning Commission and by City Council following public hearings.

# **- - D R A F T - -**

## **A CITY-WIDE PLAN OF LAND USE**

### **A Component of the Comprehensive Development Plan**

**for**

**Wilmington, Delaware**

**Department of Planning  
August 2009**

This Plan was originally prepared and adopted in 1956, and has since been amended.  
It is a component of the Comprehensive Development Plan for the City of Wilmington.

**Recommended by:**

City Planning Commission  
Resolution 56-84  
Date: November 27, 1984

**Adopted by:**

Wilmington City Council  
Resolution: 84-329  
Date: November 29, 1984

**Recommended by:**

City Planning Commission  
Resolution 25-02  
Date: February 26, 2003

**Adopted by:**

Wilmington City Council  
Resolution 03-059  
Date: July 10, 2003

Office of State Planning Coordination:  
LUPA 02-21-03-03  
July 22, 2003

**Recommended by:**

City Planning Commission  
Resolution 10-09  
Date: June 16, 2009

**Adopted by:**

Wilmington City Council  
Resolution: Pending  
Date: Pending Action on August 27,

2009

**Recommended by:**

City Planning Commission  
Resolution 13-09  
Date: August 18, 2009

**Adopted by:**

Wilmington City Council  
Resolution: Pending  
Date: Pending Action on August 20, 2009

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**Note:** The City-Wide Plan of Land Use is currently pending City Council Action on the following: 1) Section VII. Climate Change Initiatives Element, scheduled for City Council public hearing on August 27, 2009; and 2) Section VIII. Source Water Protection Plan Element, scheduled for City Council public hearing on August 20, 2009

## **Section VIII. Source Water Protection Area (SWPA) Element**

### **A. BACKGROUND**

The State of Delaware Source Water Protection Law of 2001, 7 Del. C. Sections 6081-6084, requires that the City adopt as part of its Comprehensive Development Plan, a map delineating a Source Water Protection Area ("SWPA"), for the purpose of protecting the City's source of drinking water.

In response, the City of Wilmington, Delaware Water Resources Agency and the Delaware Department of Natural Resources and Environmental Control (DNREC) identified the boundaries of the relevant watershed within the City limits for the SWPA, which is located on the Brandywine Creek upstream from the City's drinking water intake and raceway. The Brandywine Creek provides the source water for the City's drinking water plants. Water from the Creek is diverted to the drinking water treatment facilities for treatment and subsequent distribution to customers. The source water protection area was established in order to protect this source water from contamination. The SWPA is located entirely within the City boundaries, encompassing less than 10 percent of the City's geographic area. The SWPA is largely comprised of Councilmanic District #8, along with smaller portions of Councilmanic Districts #2 and #4. The northwestern edge of the boundary abuts land within New Castle County, which is also required to meet the requirements of the Delaware Source Water Protection Law of 2001, and has included provisions meeting DNREC requirements within the New Castle County Unified Development Code. The resultant SWPA boundary map is shown on Map E, "Source Water Protection Area (SWPA) in the City of Wilmington, DE," dated November 2007.

The Source Water Protection Law also requires that City Code provisions be adopted to regulate and protect the designated SWPA area from development activities and substances that may harm water quality and subtract from overall water quantity. To that end, Ordinance 09-044 amended the City Code to include the necessary provisions for regulating certain activities within the SWPA boundaries. This ordinance was introduced at Wilmington City Council on July 9, 2009 and was adopted with the recommendation of the Wilmington Planning Commission, on August 20, 2009.

### **B. IMPACT OF THE SWPA LEGISLATION**

Chapter 11 (Environment) and Chapter 48 (Zoning) of the City Code were amended to establish the Source Water Protection Area for the Brandywine Creek and the provisions which are designed to protect the SWPA, a critical area, from activities and substances that may harm water quality and subtract from overall water quantity. Overall, the provisions call for the use of environmentally sensitive land use management practices within the SWPA when dealing with underground and above-ground storage tanks; hazardous waste treatment, storage and disposal facilities; new development; the filling of wetlands; parking lots; and government-owned parks and open space. Certain features within the SWPA have been identified which require extra protection through more stringent water quality and quantity protection requirements, including erosion-prone slopes and the 200 foot buffers along the Brandywine Creeks.

## **1. Source Water Protection Area Requirements**

Standards have been enacted to address conditions which have the potential for negatively affecting the quality and quantity of the City's drinking water supply. Measures include the prohibition of certain uses from the SWPA, and compliance with DNREC Permanent Stormwater Management Water Quality Controls for development activities.

### **a. Prohibition of Certain Uses**

The following uses are prohibited within the SWPA:

- (1) Underground and aboveground storage tanks, although there are some exceptions for smaller tanks, the storage of propane and heating fuel, and tanks used in certain residential applications. Allowances have also been made for existing tanks which need replacement.
- (2) The filling of wetlands, regardless of their size.
- (3) The on-site treatment, storage or disposal of hazardous waste.

### **b. Compliance with DNREC Stormwater Management Water Quality Controls.**

Compliance with the DNREC Sediment and Stormwater Regulations is required for the purpose of stormwater management and water quality control, in cases where the proposed development activity is expected to disturb the land, resulting in the disruption or removal of existing vegetation, changes to existing grading and resultant erosion, and an increase in impermeable surfaces, all of which can impact existing stormwater runoff patterns and potentially result in negatively affecting the quality and quantity of the water in the Brandywine Creek. The regulations encourage mitigation efforts, such as through tie-ins to the existing combined sewer system, pre-treatment of stormwater discharge, and other measures. Compliance with the regulations is required for new development over 5,000 square feet; construction of new parking lots, regardless of size; and new development over 1,000 square feet within government-owned parks or open space.

### **c. Provisions for Sensitive Areas**

The regulations recognize that an additional layer of regulation is necessary to protect areas which are more sensitive to land use and development activities, which within the SWPA include erosion-prone slopes and the 200 foot buffer area along the Brandywine Creek. These sub-areas are identified on the SWPA boundary map.



(1) Erosion-Prone Slopes: Certain development activities could have detrimental effects on erosion-prone slopes, and are regulated to provide additional protection. Development within these areas can have long term impacts on the adjacent waterway, and standards call for the evaluation of the development parcel to assure that all activities, including the placement of buildings and structures, roads and driveways, are appropriately managed, and that there are no other viable alternative alignments which would better suit the site.

Erosion control and slope stabilization practices also recognize the use of vegetation as a legitimate design tool to protect slopes by reducing erosion, strengthening soil, and inhibiting landslides, resulting in an increase in general slope stability and the aesthetic quality of the property. SWPA standards dictate that the removal of vegetation from a site be evaluated in terms of the possible detrimental effect on slope stability, recharge of stormwater and existing drainage patterns. Further, that appropriate protective ground covers be utilized for exposed surfaces, whether from the removal of existing vegetation or from land disturbed by construction activities. Practices have also been identified, such as managing site work during the planting season to permit adequate time for the establishment of ground covers; and using protective covers to hold seeds and plants in place until established.

(2) 200 Foot Brandywine Creek Buffers: Certain activities could be harmful when in close proximity to the Brandywine Creek waterway and are therefore restricted within a 200 foot buffer, including the following: a) filling of the 100 year floodplain; and the installation of underground storage tanks, regardless of their size, because of the increased risk of leakage and water contamination.

#### **d. Additional Areas of Consideration**

When considering source water protection, there are other developments and activities which require attention to protect the quality and quantity of the drinking water:

(1) Paved Surfaces: The importance of stormwater management becomes evident in areas where development results in large areas of impervious paving, which reduces the absorption of water into the ground, increases stormwater runoff and affects water flow and runoff patterns. New practices permit the use of all-weather pervious, as well as impervious, materials in areas devoted to access driveways or roadways, maneuvering areas and parking berths, pads or spaces, and also calls for drainage to a sewer, or for other land management techniques as approved by the Public Works Commissioner.

(2) Snow and Ice Removal: The placement of snow and ice into the Brandywine Creek or other surface water body or the drinking water raceway, as a result of snow and ice removal activities, is prohibited to prevent contaminants from entering the drinking water supply, such as additional salt and chemicals.

(3) Land Management and Conservation: With respect to land use activities within government-owned parks and open space, development must utilize environmentally sensitive land management techniques, and comply with the USDA Natural Resources Conservation Service with respect to conservation practices for riparian forest buffers, where appropriate.

**e. Impacts on Existing Conditions**

As is typical with new legislation, those land use activities which were already legally in existence at the time that Ordinance 09-044 was adopted, are permitted to continue operation but may be subject to the new regulations should future changes be made that are in conflict with Code requirements. In addition, any formal application for new development which has previously been submitted to the City for approval may proceed without application of Division 4 regulations, provided that their development-related permits have been obtained prior to the legislation's date of introduction (July 9, 2009). The regulations also establish that nonconforming conditions which are in existence at the time the ordinance is adopted may continue in the form in which the condition existed.

**C. ADDITIONAL INFORMATION**

For additional information on the Source Water Protection Area regulations, please refer to the City Code as follows: Chapter 48 (Zoning), Article IX, Supplementary Districts, Division 4, establishing the Source Water Protection Area regulations; Chapter 48, Article XI, Supplementary Regulations, Division 3, Parking Lots, Section 48-511, General Requirements, which addresses stormwater management practices for paved driveways and parking areas; and Chapter 11 (Environment), Article IV, Source Water Protection Area, which establishes regulations related to snow and ice removal, and land use management and conservation practices for government-owned parks and open space.